APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,998	11/19/2003	Regis J. Crinon	MS1-1733US	7597

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EXAMINER
IDOWU, OLUGBENGA O

ART UNIT	PAPER NUMBER
2425	

NOTIFICATION DATE	DELIVERY MODE
06/23/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

<table>
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<tr><th colspan="2" rowspan="2">Office Action Summary</th><th>Application No.</th><th>Applicant(s)</th><th></th></tr>
<tr><th>10/716,998</th><th>CRINON ET AL.</th><th></th></tr>
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<tr><td colspan="2"></td><td>Examiner</td><td>Art Unit</td><td></td></tr>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *12 February 2010*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,14,15,19,20,22 and 26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,14,15,19,20,22 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

In response to applicants with regards to claims 1, 14, 20 and 22, and based on further

review of the MacInnis reference, the newly added limitations with regards to the

runtime environment and the extended asset interface corresponding to information

required to generate and information table and the argued limitation with regards to the

table being generated at the headend are taught by the MacInnis reference. The

limitation with regards to the runtime environment is taught in [0026] and [0033], the

extended asset interface corresponding to information required to generate an

information table [0026-0027] and the table being generated at the headend [0024-

0027]]

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claim 1-3 are rejected under 35 U.S.C. 101 because it does not fall within one of the

four statutory categories of invention. Claim 1 recites "computer storage medium" and

the claimed computer storage medium may be software carried on a wave [0054-0055],

[0066], the claim as a whole can be considered to be only a carrier wave which is not a

"process", "machine" or "article of manufacture".

The claim may be made statutory by adding "non-transitory" before the medium --, thus

excluding that portion of the scope covering transitory signals.

Claim Rejections - 35 USC § 112

Claim elements "First generating means, second generating means, a registering

means, and third generating means" of claim 20 are means (or step) plus function

limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description

fails to disclose the corresponding structure, material, or acts for the claimed function.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or

step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly

recites what structure, material, or acts perform the claimed function without introducing

any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification

already implicitly or inherently discloses the corresponding structure, material, or acts so

that one of ordinary skill in the art would recognize what structure, material, or acts

perform the claimed function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly

recites the corresponding structure, material, or acts for performing the claimed function

and clearly links or associates the structure, material, or acts to the claimed function,

without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts,

which are implicitly or inherently set forth in the written description of the specification,

perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§

608.01(o) and 2181.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1- 3, 14-15, 19- 20, 22 and 26 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Carlucci, publication number: 2004/0015999 A1 in view of

MacInnis, publication number: 2003/0028899in further view of Eyal, patent number: 6

484 199.

As per claim 1, 14, 20 and 22, Carlucci teaches a computer storage media having

processor- executable instructions that, when executed by a processor, performs a

method comprising:

receiving, by head-end equipment from a content provider, a digital television (DTV)

application and its associated metadata (Fig. 1, headend receiving data from a provider

[0050- 0052]), wherein the receiving is facilitated by an extended asset definition

interface (receiver, Fig. 5a, 78), the extended asset definition interface specifying a data

structure including the DTV application and metadata attributes (receiving data and

metadata [0087], [0089]) consisting of: an application identifier field for identifying the

DTV application(PIC, [0056], lines 5 - 10);

an application-type field for indicating a type of the DTV application (PIC, [0056], lines 5

- 10);

a visibility field for indicating the degree of control a user has over the DTV application

(trickplay, [0050], lines 19 - 24);

a permission field for denoting "sandbox" security permission of the DTV application

(trickplay, [0050], lines 19 – 24); and

a rating field for indicating a rating of the DTV application (parental control, [0086]);

generating, by the head-end equipment, an application information table for conveying

application signaling information to a DTV receiving unit, the application information

table being generated based on the associated metadata (messages [0055], [0060].

[0062], tabulated messages [0074], sending messages [0070]);

generating, by the head-end equipment, a content referencing identifier for the

DTV application (embedding data to reference other data, [0114], [0131], [0154]);

registering, by the head-end equipment, an authority record with an authority to enable

the DTV receiving unit to resolve the content referencing identifier (encryption and

decryption, [0081] – [0084]);

sending, by the head-end equipment, a transmission to the DTV receiving unit, wherein

such transmission comprises the data grouping, whereby the application signaling

information is used by the DTV receiving unit to discover and launch the DTV

application (user receiving data containing triggers, [0154]),

wherein the head-end equipment, the content provider, and the DTV receiving unit are

each separate and distinct from each other (program source, cable system, set top box,

[0051]).

 Carlucci does not teach

a profile field for indicating a minimum profile of a system on which the DTV application

will execute; specifying a runtime environment needed to run the DTV application,

generating by the headend equipment, an application information table for conveying

application signaling information to a DTV receiving unit, the application table generated

based on the associated metadata. The extended asset definition interface being

defined to correspond to information that an application signaling generator of the head-

end equipment needs to generate the application information table.

an originator identifier field for identifying an originator of the DTV application;

In an analogous art, MacInnis teaches indicating a minimum profile of a system on

which an application will execute (system requirement, [0033]),

specifying a runtime environment needed to run the DTV application (system

requirements, [0026][0033]), generating by the headend equipment, an application

information table for conveying application signaling information to a DTV receiving unit

(Table T being generated at the Headend and containing application requirements,

[0026], [0027]), the application table generated based on the associated metadata (the table being based on system requirements, [0026]). The extended asset definition interface defined to correspond to information that an application signaling generator of the head-end equipment needs to generate the application information table (using received metadata from the content provider to generate tables at the headend, [0026 – 0027]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Carlucci's retrieval system by including a field for system requirements, metadata table and generating the table based on received metadata as described in MacInnis for the advantage of giving the user the opportunity to select data relevant to the user's device and also for reducing system traffic by selective transmission or reception.

The combination of Carlucci and MacInnis does not teach an originator identifier field for identifying an originator of the DTV application

In an analogous art, Eyal teaches an originator identifier field for identifying an originator of the DTV application (source, col. 12, lines 47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Carlucci and MacInnis' interactive application system by including information about the source of data as described in Eyal's media search system and playback for the advantages of selecting applications that better fit user preferences.

As per claim 2, the combination of Carlucci, MacInnis and Eyal teach a computer

storage media as recited in claim 1, wherein the method further comprises storing, by

the head-end equipment, the DTV application and its associated metadata (Carlucci:

[0049],[0052], [0055], [0102]).

As per claim 3, the combination of Carlucci, MacInnis and Eyal teach wherein the

method further comprises constructing and formatting, by the head-end equipment, a

DTV data service transmission which comprises the DTV application (Carlucci: [0101]).

As per claim 15, the combination of Carlucci, MacInnis and Eyal teach further

comprising provisioning transmission bandwidth, by the head-end equipment, to

transmit periodically the application signaling information built for the metadata

(Carlucci: triggers, [0131], [0154]).

As per claims 19 and 26, the combination of Carlucci, MacInnis and Eyal teach wherein

the metadata attributes further comprise:

a profile field for indicating a minimum profile of a system on which the DTV application

will execute (MacInnis: system requirement, [0033]); and

a permission field for denoting "sandbox" security permission of the DTV application

(Carlucci: trickplay, [0050], lines 19 – 24).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUGBENGA IDOWU whose telephone number is (571)270-1450. The examiner can normally be reached Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 5712727527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OLUGBENGA IDOWU/
Examiner, Art Unit 2425

/Brian T. Pendleton/

Supervisory Patent Examiner, Art Unit 2425